

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached pages are captioned **"VERSION WITH MARKINGS TO SHOW CHANGES MADE"**.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

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In the specification:

Paragraph beginning at page 1, line 18 has been amended as follows:

The invention relates generally to methods and apparatus for managing content of a company-wide intranet or internet website, and more particularly, to systems for organizing data related in a single database so the content can be managed from a global perspective.

Paragraph beginning at page 1, line 23 has been amended as follows:

As more and more companies begin to provide a presence on the internet, they are confronted with the issues of presentation of information and conformity within the preparation of the presentations. Various schemes have been presented to assist the companies in preparing the presentation screens that would appear on the internet website, along with placing the presentation of the page in a location or locations that are linked, requiring a user to traverse various web pages to obtain the presentation desired. Such approaches have included delegated authority systems, have used content aggregation, have provided graphical interfaces and dynamically generated web documents. Other general website management has included editing and generating information, data access/processing systems, automatic publishing systems and group wireware systems. These approaches generally requiredemand a knowledge of the HTML operating language, a capability generally only found in the website programmers and not among general employees.

Paragraph beginning at page 2, line 5 has been amended as follows:

The prior art generally fails to disclose a process for implementing changes to an internet website, such that employees in a corporation may define and enforce a common style of page layout to provide an application that can be accessed by multiple users at the same time by an internet browser, where the application allows corporate employees to manage content, create new web pages, process content through workflow, and define new content and style which can then be provided to a user

without an undue amount of searching to find the ~~desired~~desired information. Accordingly, once the presentation page is completed, data elements relating to the significance of the content are utilized to store information relating to the content in various locations or sites, with the various sites interconnected through the use of links. Thus, to obtain the information desired, a user may, of necessity, be forced to traverse several links to obtain the desired page with the ~~required~~desired information.

Paragraph beginning at page 2, line 20 has been amended as follows:

The previously described deficiencies in the prior art are addressed in the present invention which, in conjunction with a content management application, provides an ~~internet~~intranet application to provide a system for implementing changes to both an intranet or an internet website and, permitting a company to manage content for its website from a global perspective. The content, created and stored once, can then be shared and managed across a global organization. The information architecture system is the basic underlying infrastructure that allows a company to efficiently manage its content while taking advantage of various efficiencies. The data can thus be viewed from a holistic perspective utilizing a structure of website contents that results from the relationship between objects on ~~he~~the physical pages, i.e., appearance only, instead of the prior art reliance on the significance of the data elements displayed on the page, thereby providing a look and feel driven structure. The system function supports a workflow model for the launching of content and is extensible so the ~~database~~information architecture does not need to be expanded in order to ~~collect~~support new data. Further, the system is platform and software independent whereby the content stored in the infrastructure can be delivered on any platform with the system providing granularity of content management. In one exemplary embodiment, the system makes use of the eXtensible Markup Language (XML) ~~and to store~~ relevant content ~~and data fields are associated close to one another to reduce the amount of data analysis required when searching.~~ The use of XML provides extensible data schema, content reuse, also known as repurposing, and flexible look and feel. Since the information architecture is XML based, it can be implemented either using a database, XML repository or a flat file based system ~~includes multiple tables within a single database, so a search only requires the opening of that database to access the~~

~~multiple tables. Thus, all data is aggregated into one database to avoid having to access many databases which typically may include different formats and different data structures.~~

Paragraph beginning at page 3, line 21 has been amended as follows:

The above and other features and advantages of the present invention are hereinafter described in the following detailed description of exemplary embodiments to be read in conjunction with the accompanying drawing figures, wherein like reference numerals are used to identify the same or similar parts or steps in the similar views, and:

**Figure 1** is ~~aan~~ exemplary pictorial representation of the workflow and page storage aspect of the present invention;

**Figure 2** is ~~aan~~ exemplary block diagram depicting an embodiment of the NetworkInformation Architecture System using Content Management of the present invention;

**Figure 3** is ~~aan~~ exemplary block diagram depicting a user accessing the global database of the NetworkInformation Architecture System;

**Figure 4a-4c** are ~~typical examples of~~ exemplary screen presentations ~~accessible~~ provided by a user of the NetworkInformation Architecture System; and

**Figure 5** is ~~aan~~ exemplary workflow diagram depicting a logical data model of the network information architecture.

Paragraph beginning at page 4, line 12 has been amended as follows:

The present invention may be described herein in terms of functional block components and various processing steps. It should be appreciated that such functional blocks may be realized by any number of hardware and/or software components configured to perform the specified functions. For example, the ~~present invention may employ various integrated circuit (IC) components, e.g., memory elements, processing elements, logic elements, look-up tables, and the like, which may carry out a variety of functions under the control of one or more microprocessors or other control devices. Similarly, the software elements of the present invention may be implemented with any programming or scripting language such as C, C++, Java,~~

COBOL, assembler, PERL, or the like, with the various algorithms being implemented with any combination of data structures, objects, processes, routines or other programming elements. Further, it should be noted that the present invention may employ any number of conventional techniques for data transmission, signaling, data processing, network control, and the like. Still further, the invention could be used to detect or prevent security issues with a scripting language, such as JavaScript, VBScript or the like.

The following new paragraphs were added at page 5, line 13:

As hereinafter described, the present invention is directed to a system and method for providing management such as creation, manipulation, storage, control, and retrieval of digital content for use in such as a company website on a global basis and includes support for new page layouts and component layouts (i.e., support for new presentation styles whether in Hypertext Markup Language (HTML), Wireless Markup Language (WML), PDF, or any other authoring language in which the presentation may be written).

Further, the present invention permits content repurposing, i.e., the reuse of existing content for other forms of media once the content has been produced and stored in a database. Accordingly, repurposing permits use of the content in such forms as mail, print, other websites or any application in which the printed or electronic word is used and which may take advantage of the content stored in the database.

In conjunction with repurposing, the present invention also permits the use of the content from the database to support all foreign language usage so as to take advantage of the information architecture database content. As a result of this, the information architecture of the present invention provides for a separation of data from the presentation itself. Thus, the information architecture data content, not being tied to the presentation, may be utilized in any language, in any format, and/or for any media.

Paragraph beginning at page 5, line 14 has been amended as follows:

Referring now to **Figure 1**, there is shown at 100 aan exemplary pictorial representation of the flow diagram of the information architecture system of the present invention. The site administrator 102, initiates a project to develop a new web page by

assigning an author 106 to create the page and its XML representation is stored in the database using a content management application system 108. This starts the workflow 104 whereby the author creates the page and, then the author submits it for approval through various levels. Once the approvals are obtained, the site administrator 102 approves a content launch 110 ~~to a database 120~~. While various scripting languages may be used in creating content and/or a page, by way of example only and not by way of limitation, the content/page is written in the eXtensible Markup Language (XML) and is stored in database 120 as an XML file.

Paragraph beginning at page 5, line 25 has been amended as follows:

An external web user 130 wishing to access the information contained in the page would request the page through a CDAContent Delivery Application (CDA) translator 140. The CDA translator 140 would query the database 120, retrieve the page and translate the XML file into an HTML page or any other presentation format suitable for user's device for presentation to the user 130.

Paragraph beginning at page 6, line 11 has been amended as follows:

Designated content approvers 208 review the content items produced by content author 206 and pass them through an approval process. Content approvers 208 mark the items as approved or rejected and, when the new content has been approved by all concerned users in the workflow, local site administrator 202 launches the content to the global database 220. Users, using web browsers 230a, 230b, 230c, interface through the worldwide web 232 ~~requesting data to~~ review the launched content. In some instances, the request ~~must~~ may be processed through a firewall 234 providing security to the global database 220. Again, the XML file from the global database containing the requested information is processed through a CDA translator into HTML, or a representation suitable for the user's device, passed through the firewall 234 and presented ~~as in an HTML~~ or suitable representative language format on the worldwide web 232 for access by the web user requesting the information.

Paragraph beginning at page 6, line 23 has been amended as follows:

Referring now to **Figure 3**, there is shown an exemplary block diagram at 300 of a user accessing the global database of the network architecture system of the present invention. A user 330 connects to the internet or worldwide web 332, logging on through a firewall 334, if such is present, to a CDA translator to request information from database 320. The database, comprising various XML files relating to the various pages stored therein in XML, as Segment 1, 350, Segment 2, 352 through Segment X, 354. Once the proper segment containing the requested page is located, it is transmitted from the database 320 to the CDA translator, which translates the XML file to, for example, an HTML page for presentation through the firewall 334 to the internet 332 for presentation to user 330.

Paragraph beginning at page 7, line 8 has been amended as follows:

Referring also to **Figures 4a-4c**, ~~typical examples of~~ exemplary screen presentations accessible by user of the network architecture system are shown. The presentations 4a, 4b, 4c correspond to the various segments 350, 352, 354 depicted in **Figure 3** comprising the information relating to the content contained within the page.

Paragraph beginning at page 7, line 13 has been amended as follows:

Referring now to **Figure 5**, each exemplary information segment shown in **Figure 3** may be seen to include a top level index to the information contained within the page/segment at 502. The page index defines the location of page level information at 504. Page level information 504 defines segment component mapping at 506. Information contained within page component mapping 506 relates to component content information 508. Component content information 508 contains information relating to the various parts of a page, such as the navigation components, the cross-sell components, copyright components, and the like. Additionally, the component content information 508 includes page key word relationships, along with the component type information 510. Component type information 510 further defines the component item information used in generating various items within a page. Base element information 514 provides information used in developing the component item information 512.

In the Claims:



Claim 1 has been amended as follows:

1. A computer-implemented method for managing webdigital content for a company website on a global basis, comprising the steps of:

- creating at least one web content page having objects defining said content, said objects comprised of elements;
- defining relationships between said objects on said content page and elements comprising said objects;
- generating a scriptingmarkup language file incorporating said relationship definitions; and
- storing said scriptingmarkup language file in a single data base globally accessible by a user.

Claim 2 has been amended as follows:

2. The method of claim 1, including generating said scriptingmarkup language file in eXtensible Markup Language (XML).

Claim 3 has been amended as follows:

3. The method of claim 1, including the steps of:

- retrieving said stored filedata; and
- translating said retrieved file to a Hypertext Markup Language (HTML) markup language file for presentation on said company website upon request by a user of said company website.

Claim 5 has been amended as follows:

5. The method of claim 2, further including the steps of:

- retrieving said stored filedata; and
- translating said retrieved file to a Hypertext Markup Language (HTML) data to a preselected markup language file for presentation on said company website upon request.

Claim 6 has been amended as follows:



6. The method of claim 2, including storing said scriptingmarkup language file in an extensible database that is platform and software independent.

Claim 7 has been amended as follows:

7. A system for managing webdigital content for a company website on a global basis, comprising:

at least one web content page, including objects defining said page;  
said objects incorporating elements in a defined relationship;  
a scriptingmarkup language filedata incorporating said relationship; and  
a database coupledconfigured to receive and store said scriptingmarkup language filedata, said database globally accessible by a user.

Claim 8 has been amended as follows:

8. The system of claim 7, wherein said scriptingmarkup language is eXtensible Markup Language (XML).

Claim 9 has been amended as follows:

9. A system of claim 7, further including a translator for requesting and receiving a scriptingmarkup language filedata from said database and producing a Hypertext Markup Language (HTML) file for presentation on said company website.

Claim 9 has been amended as follows:

10. The system of claim 8, further including a translator for requesting and receiving a XML scriptinglanguage file data from said database and producing a Hypertext Markup Language (HTML) markup language file for presentation on said company website an appropriate device.

### **In the Abstract:**

The abstract paragraph beginning at page 12, line 2 has been amended as follows:

A system and method for providing management of websuch as creation, manipulation, storage, control, and retrieval of digital content for a company website on a global basis. WebDigital content is created and stored in, for example, the eXtensible

Markup Language (XML) ~~files~~format ~~from~~using the relationship between objects on the physical page and the elements comprising the objects. The XML ~~file~~data is developed by defining page components, mapping the components on a page and indexing the page for future retrieval of the page. The ~~file~~data is then stored in a single database, as segments related to the page, for call-up by a user.